

What is claimed is:

CLAIMS

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2 1. A method for managing an auction, comprising:
3 specifying an auction behavior; and
4 specifying at least one rule for controlling when a bid may be placed
5 automatically for a bidder in the auction according to the specified auction behavior.

1 2. The method of claim 1, further comprising:
2 automatically placing at least one bid for a bidder according to the at least one
3 rule and according to at least one specified bidding behavior.

1 3. The method of claim 2, wherein the specified bidding behavior comprises a
2 maximum bid and a minimum bid increment.

1 4. The method of claim 2, wherein automatically placing at least one bid for the
2 bidder comprises:
3 if a highest bid in the auction is not from the bidder, placing the bid according to
4 the at least one specified bidding behavior at a time according to the at least one rule.

1 5. The method of claim 1, further comprising:
2 receiving at least one bid placed automatically according to the at least one rule
3 and according to at least one specified bidding behavior.

1 6. The method of claim 1, wherein specifying an auction behavior comprises
2 determining the auction behavior according to information about the auction.

1 7. The method of claim 6, wherein the information about the auction comprises at
2 least one of information about an item, information about a seller and information about
3 bidders.

1 8. The Method of claim 7, wherein determining the auction behavior comprises;
2 receiving information about one or more prior auctions, wherein each of the prior
3 auctions has an associated auction behavior;
4 identifying at least one of the prior auctions as similar to the auction based on the
5 information about the auction and the information about the one or more prior auctions;
6 and
7 selecting one or more of the prior auctions identified as similar to the auction.

1 9. The method of claim 8, further comprising selecting the auction behavior
2 associated with the selected one or more prior auctions as the auction behavior.

1 10. The method of claim 8, wherein identifying at least one of the prior auctions
2 similar to the auction comprises:
3 comparing information about the auction to the information about the one or
4 more prior auctions using a metric to obtain a measure; and
5 comparing the measure to a threshold defining an extent of similarity.

1 11. The method of claim 8, wherein the selected one or more prior auctions has a best
2 outcome among the at least one of the prior auctions identified as similar to the auction.

1 12. The method of claim 11, wherein a best outcome is at least one of a highest price
2 and a fastest sale.

1 13. The method of claim 1, wherein specifying at least one rule comprises:
2 associating at least one rule with at least one candidate auction behavior from
3 which the auction behavior is specified; and
4 selecting the at least one rule associated with the specified auction behavior.

1 14. The method of claim 13, wherein associating at least one rule with each candidate
2 auction behavior comprises:
3 determining at least one rule that corresponds to each candidate auction behavior;
4 and
5 storing the at least one rule in a database.

1 15. The method of claim 14, wherein determining at least one rule which corresponds
2 to each candidate auction behavior comprises:
3 characterizing each candidate auction behavior; and
4 selecting rules corresponding to the candidate auction behavior.

1 16. The method of claim 13, wherein a candidate auction behavior is a behavior of an
2 auction similar to the current auction.

1 17. The method of claim 1, further comprising:
2 evaluating actual auction behavior according to bids received in the auction; and
3 modifying the at least one rule for controlling when a bid may be placed
4 automatically in the auction according to the actual auction behavior.

1 18. The method of claim 17, wherein evaluating the actual auction behavior
2 comprises:
3 characterizing the actual auction behavior according to bids received in the
4 auction;
5 comparing the selected auction behavior to the actual auction behavior.

1 19. The method of claim 17, wherein modifying the at least one rule comprises:
2 selecting at least one alternative rule corresponding to the actual auction
3 behavior.

1 20 The method of claim 19, wherein selecting the at least one alternative rule
2 comprises selecting the at least one alternative rule randomly from among a plurality of
3 rules.

1 21. A system for managing an auction, comprising:
2 means for identifying an auction behavior; and
3 means for identifying at least one rule for controlling when a bid may be placed
4 automatically for a bidder in the auction according to the selected auction behavior.

1 22. A system for managing an auction, comprising:

2 an auction behavior selector providing an indication of a selected auction
3 behavior; and
4 a rule generator having an input for receiving an indication of the selected auction
5 behavior and an output providing at least one rule for controlling when a bid may be
6 placed automatically for a bidder in the auction to encourage the selected auction
7 behavior.

1 23. The system of claim 22, wherein the auction behavior selector comprises:
2 a comparator having an input for receiving the information about the at least one
3 prior auction and information about the auction, and an output for providing an
4 indication of at least one of the prior auctions similar to the auction;
5 a selector having an input for receiving the indication of one or more of the prior
6 auctions identified as similar to the auction and an output for providing an indication of
7 the auction behavior associated with a selected one or more of the prior auctions.

1 24. A computer program product comprising:
2 a computer readable medium; and
3 computer program instructions stored on the computer readable medium, wherein
4 the computer program instructions, when executed by a computer, direct the computer to
5 perform a method for managing an auction, the method comprising:
6 selecting an auction behavior; and
7 specifying at least one rule for controlling when a bid may be placed
8 automatically for a bidder in the auction according to the selected auction behavior.

1 25. A method for selecting an auction behavior for an auction, comprising:
2 receiving information about the auction; and
3 matching the information about the auction to an auction behavior.

1 26. The method of claim 25, wherein matching the information about the auction to
2 the auction behavior comprises:
3 receiving information about one or more prior auctions, wherein each of the prior
4 auctions has an associated auction behavior;

5 identifying at least one of the prior auctions similar to the auction using the
6 information about the auction and the information about the one or more prior auctions;
7 and
8 selecting one or more of the prior auctions identified as similar to the auction.

1 27. The method of claim 26, further comprising selecting the auction behavior
2 associated with the selected one or more prior auctions as the auction behavior.

1 28. The method of claim 26, wherein identifying at least one of the prior auctions
2 similar to the auction comprises:
3 comparing information about the auction to the information about the one or
4 more prior auctions using a metric to obtain a measure; and
5 comparing the measure to a threshold defining an extent of similarity.

1 29. The method of claim 26, wherein the selected one or more prior auctions has a
2 best outcome among the at least one of the prior auctions identified as similar to the
3 auction.

1 30. The method of claim 29, wherein a best outcome is at least one of a highest price
2 and a fastest sale.

1 31. The method of claim 25, further comprising:
2 evaluating actual auction behavior according to bids received in the auction.

1 32. The method of claim 31, wherein evaluating the auction behavior comprises:
2 characterizing the actual auction behavior according to bids received in the
3 auction; and
4 comparing the selected auction behavior to the actual auction behavior.

1 33. The method of claim 32, further comprising determining whether to implement a
2 new rule if the auction behavior is substantially different from the selected auction
3 behavior.

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2 34. A system for selecting an auction behavior for an auction, comprising:
3 means for accepting information about the auction; and
4 means for comparing the information about the auction to a behavior.

1 35. A system for selecting an auction behavior for an auction, comprising:
2 a behavior database in which associations between information about auctions
3 and auction behaviors is stored; and
4 a behavior selector having an input for receiving information about the auction
5 and an output for providing an indication of an auction behavior for the auction using the
6 behavior database

1 36. A computer program product comprising:
2 a computer readable medium; and
3 computer program instructions stored on the computer readable medium, wherein
4 the computer program instructions, when executed by a computer, direct the computer to
5 perform a method for selecting an auction behavior for an auction, the method
6 comprising:
7 receiving information about the auction; and
8 matching the information about the auction to an auction behavior.

1 37. A method for specifying at least one rule for automatic bidding in an auction,
2 comprising:
3 receiving an indication of a selected auction behavior; and
4 matching the auction behavior to the at least one rule to encourage the auction
5 behavior.

1 38. The method of claim 37, wherein matching the auction behavior to rules
2 comprises:
3 associating at least one rule with at least one candidate auction behavior from
4 which the auction behavior is selected; and
5 selecting the at least one rule associated with the selected auction behavior.

1 39. The method of claim 38, wherein a candidate auction behavior is a behavior of an
2 auction similar to the current auction.

1 40. The method of claim 38, wherein associating at least one rule with each candidate
2 auction behavior comprises:
3 determining at least one rule which corresponds to each candidate auction
4 behavior; and
5 storing the selected rules in a database in manner accessible by an indication of
6 the candidate auction behavior.

1 41. The method of claim 40, wherein determining at least one rule which corresponds
2 to each candidate auction behavior comprises:
3 characterizing each candidate auction behavior; and
4 selecting rules corresponding to the candidate auction behavior.

1 42. The method of claim 37, wherein the selected auction behavior differs from
2 actual auction behavior during the auction, the method further comprising:
3 determining whether the selected auction behavior should be modified; and
4 modifying the at least one rule for controlling when a bid may be placed
5 automatically in the auction according to the actual auction behavior.

1 43. The method of claim 42, wherein modifying the at least one rule comprises:
2 selecting a rule corresponding to the actual auction behavior

1 44. The method of claim 43, wherein selecting a rule comprises selecting the rule
2 randomly from among a plurality of rules corresponding to the actual auction behavior.

1 45. A system for specifying a rule for automatic bidding in an auction, comprising:
2 means for accepting an indication of a selected auction behavior; and
3 means for comparing the auction behavior to rules to encourage the auction
4 behavior.

1 46. A system for specifying a rule for automatic bids in an auction, comprising:

2 a rule database in which associations between rules and auction behaviors are
3 stored; and
4 a rule selector having an input for receiving an indication of a selected auction
5 behavior and an output providing rules to encourage the auction behavior from the rule
6 database.

1 47. A computer program product, comprising:
2 a computer readable medium; and
3 computer program instructions stored on the computer readable medium, wherein
4 the computer program instructions, when executed by a computer, direct the computer to
5 perform a method for specifying a rule for automatic bids in an auction, comprising:
6 receiving an indication of a selected auction behavior; and
7 matching the auction behavior to rules to encourage the auction behavior.

1 48. A method for automatically placing a bid for an item for a bidder in an auction,
2 comprising:
3 determining whether a bid for the bidder may be accepted;
4 applying a rule associated with the bidder and having a condition specifying
5 when to place a bid; and
6 if the condition of the rule is satisfied, and if a highest bid in the auction is not
7 from the bidder, and if a bid for the bidder may be accepted, placing the bid according to
8 a specified bidding behavior.

1 49. The method of claim 48, wherein the condition is defined by information about
2 the auction.

1 50. The method of claim 49, where the information about the auction includes at least
2 one of a number of bids subsequent to a previous bid by the bidder and a period of time
3 elapsed since the previous bid by the bidder.

1 51. The method of claim 49, wherein the information about the auction includes at
2 least one of information about bidders participating in the auction, information about

1 55. A method for determining a behavior of an auction, comprising:
2 receiving information indicating bidding information for an auction;
3 determining at least one of an average time period between bids and an average
4 increment between bids; and
5 storing the determined information as an associated auction behavior.

1 56. A method for determining a beneficial auction behavior for an auction of an item,
2 comprising:
3 receiving information indicating an outcome and bidding information for a
4 plurality of concluded auctions of similar items;
5 determining a behavior of each of the concluded auctions from the bidding
6 information:
7 selecting the behavior of the auction having the best outcome as the beneficial
8 auction behavior.

1 57. A digital information product, comprising:
2 a computer-readable medium; and
3 information stored on the computer-readable medium and defining data
4 associating each of one or more desired auction behaviors to one or more rules for
5 controlling when a bid may be placed automatically for a bidder in an auction.

1 58. A digital information product defining a proxy bidder, comprising:
2 a computer-readable medium;
3 information stored on the computer-readable medium and defining data
4 associating a maximum bid and a bidder with an indication of a rule for controlling when
5 a bid may be placed automatically for a bidder in an auction.